WHAT IS CLAIMED AS NEW AND IS INTENDED TO BE SECURED BY LETTERS PATENT IS:

1. A method of coating a polymeric substrate comprising:

pretreating the substrate by application of at least one physical method selected from the group consisting of corona discharge, flaming, glow discharge, irradiation with electromagnetic waves, and a plasma pretreatment; then

coating said pretreated substrate with a composition comprising a fluoroalkyl-containing silicon compound.

2. The method of Claim 1, wherein said pretreating is carried out under reduced pressure in an atmosphere selected from the group consisting of air, nitrogen, argon, and mixtures thereof.

3. The method of Claim 2, wherein said reduced pressure is from 0.001 mbar to 0.99 bar absolute.

4. The method of Claim 1, wherein said pretreating is a plasma treatment carried out at a pressure of from 0.002 mbar to 0.1 bar absolute.

5. The method of Claim 1, wherein the substrate surface is exposed to light with a wavelength of from 10 to 400 nm.

6. The method of Claim 5, wherein the wavelength is 150 to 350 nm.

7. The method of Claim 1, wherein said pretreating is carried out for from 5 seconds to 30 minutes.

8. The method of Claim 7, wherein said pretreating is carried out for from 10 seconds to 5 minutes.

9. The method of Claim 1, wherein said pretreating is a low pressure plasma, a direct current low frequency glow discharge, a direct current high frequency glow discharge, a microwave/ECR plasma, a non-self-sustaining glow discharge, a corona discharge, flaming, and combinations thereof.

10. The method of Claim 1, wherein the polymeric substrate comprises at least one polymer selected from the group consisting of polymers of acrylic, methacrylic or vinyl compounds, polymers comprising phenolic resins, melamine resins and epoxy resins, polycarbonate, polyolefins, polyethers, polyoxymethylene, polystyrene, polyamine, polyamide, polyimide, polyurethane, polysulfone, and polyester.

11. The method of Claim 1, wherein the fluoroalkyl-containing silicon compound is selected from the group consisting of a fluoroalkyl-containing monomeric alkoxysilane, a fluoroalkyl-containing monomeric silanol, a fluoroalkyl-containing siloxane, and the substrate surface thus treated is optionally dried and/or thermally post-treated.

12. The method of Claim 1, further comprising heat treating said coated substrate after said coating.

13. The method of Claim 12, wherein the heat treatment is carried out at a temperature of 80 to 150°C for from 5 to 150 minutes.

14. A coating on a polymeric substrate, made by the process of Claim 1.

15. A polymeric substrate coated by the process of Claim 1.

16. The coated polymeric substrate of Claim 15, wherein the polymeric substrate is selected from the group consisting of an injection molding, a film, and a textile.

17. A method of protecting a plastic substrate comprising:

pretreating the substrate by application of at least one physical method selected from the group consisting of corona discharge, flaming, glow discharge, irradiation with electromagnetic waves, and a plasma pretreatment; then

coating said pretreated substrate with a composition comprising a fluoroalkyl-containing silicon compound.

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